

(iv) A flight instructor certificate with an instrument rating.

(d) Receive a logbook endorsement from an authorized instructor on the fundamentals of instructing listed in § 61.185 of this part appropriate to the required knowledge test;

(e) Pass a knowledge test on the areas listed in § 61.185(a)(1) of this part, unless the applicant:

(1) Holds a flight instructor certificate or ground instructor certificate issued under this part;

(2) Holds a teacher's certificate issued by a State, county, city, or municipality that authorizes the person to teach at an educational level of the 7th grade or higher; or

(3) Is employed as a teacher at an accredited college or university.

(f) Pass a knowledge test on the aeronautical knowledge areas listed in § 61.185(a)(2) and (a)(3) of this part that are appropriate to the flight instructor rating sought;

(g) Receive a logbook endorsement from an authorized instructor on the areas of operation listed in § 61.187(b) of this part, appropriate to the flight instructor rating sought;

(h) Pass the required practical test that is appropriate to the flight instructor rating sought in an:

(1) Aircraft that is representative of the category and class of aircraft for the aircraft rating sought; or

(2) Flight simulator or approved flight training device that is representative of the category and class of aircraft for the rating sought, and used in accordance with a course at a training center certificated under part 142 of this chapter.

(i) Accomplish the following for a flight instructor certificate with an airplane or a glider rating:

(1) Receive a logbook endorsement from an authorized instructor indicating that the applicant is competent and possesses instructional proficiency in stall awareness, spin entry, spins, and spin recovery procedures after providing the applicant with flight training in those training areas in an airplane or glider, as appropriate, that is certificated for spins; and

(2) Demonstrate instructional proficiency in stall awareness, spin entry, spins, and spin recovery procedures.

However, upon presentation of the endorsement specified in paragraph (i)(1) of this section an examiner may accept that endorsement as satisfactory evidence of instructional proficiency in stall awareness, spin entry, spins, and spin recovery procedures for the practical test, provided that the practical test is not a retest as a result of the applicant failing the previous test for deficiencies in the knowledge or skill of stall awareness, spin entry, spins, or spin recovery instructional procedures. If the retest is a result of deficiencies in the ability of an applicant to demonstrate knowledge or skill of stall awareness, spin entry, spins, or spin recovery instructional procedures, the examiner must test the person on stall awareness, spin entry, spins, and spin recovery instructional procedures in an airplane or glider, as appropriate, that is certificated for spins;

(j) Log at least 15 hours as pilot in command in the category and class of aircraft that is appropriate to the flight instructor rating sought; and

(k) Comply with the appropriate sections of this part that apply to the flight instructor rating sought.

[Doc. No. 25910, 62 FR 16298, Apr. 4, 1997; Amdt. 61-103, 62 FR 40907, July 30, 1997; Amdt. 61-124, 74 FR 42561, Aug. 21, 2009]

§ 61.185 Aeronautical knowledge.

(a) A person who is applying for a flight instructor certificate must receive and log ground training from an authorized instructor on:

(1) Except as provided in paragraph (b) of this section, the fundamentals of instructing, including:

- (i) The learning process;
- (ii) Elements of effective teaching;
- (iii) Student evaluation and testing;
- (iv) Course development;
- (v) Lesson planning; and
- (vi) Classroom training techniques.

(2) The aeronautical knowledge areas for a recreational, private, and commercial pilot certificate applicable to the aircraft category for which flight instructor privileges are sought; and

(3) The aeronautical knowledge areas for the instrument rating applicable to the category for which instrument flight instructor privileges are sought.

(b) The following applicants do not need to comply with paragraph (a)(1) of this section:

(1) The holder of a flight instructor certificate or ground instructor certificate issued under this part;

(2) The holder of a current teacher's certificate issued by a State, county, city, or municipality that authorizes the person to teach at an educational level of the 7th grade or higher; or

(3) A person employed as a teacher at an accredited college or university.

[Doc. No. 25910, 62 FR 16298, Apr. 4, 1997; Amdt. 61–103, 62 FR 40907, July 30, 1997]

§61.187 Flight proficiency.

(a) *General.* A person who is applying for a flight instructor certificate must receive and log flight and ground training from an authorized instructor on the areas of operation listed in this section that apply to the flight instructor rating sought. The applicant's logbook must contain an endorsement from an authorized instructor certifying that the person is proficient to pass a practical test on those areas of operation.

(b) *Areas of operation.* (1) For an airplane category rating with a single-engine class rating:

- (i) Fundamentals of instructing;
- (ii) Technical subject areas;
- (iii) Preflight preparation;
- (iv) Preflight lesson on a maneuver to be performed in flight;
- (v) Preflight procedures;
- (vi) Airport and seaplane base operations;
- (vii) Takeoffs, landings, and go-arounds;
- (viii) Fundamentals of flight;
- (ix) Performance maneuvers;
- (x) Ground reference maneuvers;
- (xi) Slow flight, stalls, and spins;
- (xii) Basic instrument maneuvers;
- (xiii) Emergency operations; and
- (xiv) Postflight procedures.

(2) For an airplane category rating with a multiengine class rating:

- (i) Fundamentals of instructing;
- (ii) Technical subject areas;
- (iii) Preflight preparation;
- (iv) Preflight lesson on a maneuver to be performed in flight;
- (v) Preflight procedures;
- (vi) Airport and seaplane base operations;

(vii) Takeoffs, landings, and go-arounds;

- (viii) Fundamentals of flight;
- (ix) Performance maneuvers;
- (x) Ground reference maneuvers;
- (xi) Slow flight and stalls;
- (xii) Basic instrument maneuvers;
- (xiii) Emergency operations;
- (xiv) Multiengine operations; and
- (xv) Postflight procedures.

(3) For a rotorcraft category rating with a helicopter class rating:

- (i) Fundamentals of instructing;
- (ii) Technical subject areas;
- (iii) Preflight preparation;
- (iv) Preflight lesson on a maneuver to be performed in flight;
- (v) Preflight procedures;
- (vi) Airport and heliport operations;
- (vii) Hovering maneuvers;
- (viii) Takeoffs, landings, and go-arounds;

- (ix) Fundamentals of flight;
- (x) Performance maneuvers;
- (xi) Emergency operations;
- (xii) Special operations; and
- (xiii) Postflight procedures.

(4) For a rotorcraft category rating with a gyroplane class rating:

- (i) Fundamentals of instructing;
- (ii) Technical subject areas;
- (iii) Preflight preparation;
- (iv) Preflight lesson on a maneuver to be performed in flight;
- (v) Preflight procedures;
- (vi) Airport operations;
- (vii) Takeoffs, landings, and go-arounds;

- (viii) Fundamentals of flight;
- (ix) Performance maneuvers;
- (x) Flight at slow airspeeds;
- (xi) Ground reference maneuvers;
- (xii) Emergency operations; and
- (xiii) Postflight procedures.

(5) For a powered-lift category rating:

- (i) Fundamentals of instructing;
- (ii) Technical subject areas;
- (iii) Preflight preparation;
- (iv) Preflight lesson on a maneuver to be performed in flight;
- (v) Preflight procedures;
- (vi) Airport and heliport operations;
- (vii) Hovering maneuvers;
- (viii) Takeoffs, landings, and go-arounds;
- (ix) Fundamentals of flight;
- (x) Performance maneuvers;
- (xi) Ground reference maneuvers;